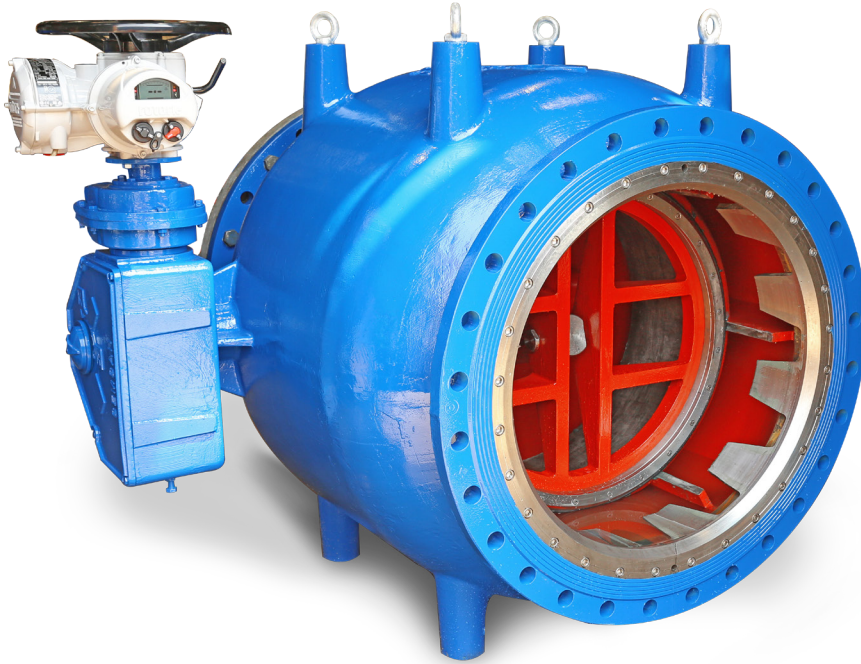




**PUMP, VALVE AND DAM
EQUIPMENT
PLUNGER VALVES**





ADVANTAGES

- Pressure, flow rate and water level control valve
- Low operation torques on high pressure diferences
- High safety coefficient design
- Lineer regulation capability
- Suitable for modulating operation
- Low cavitation risk
- Metal seaing, additional EPDM seal ring
- Special outlet design for project.
- Operation types for application areas
- Low maintenance cost

APPLICATION AREAS

- Open – Close valve for high presure and flow velocity
- Pump Control Valve
- Water Level Control Valve
- Bottom Outlet Valve
- Turbine Inlet and Turbine By – Pass Valve
- Pressure Control Valve for Drinking Water
- Flow Rate Regulation Valve
- Pressure Control for Irrigation Projects

DESIGN

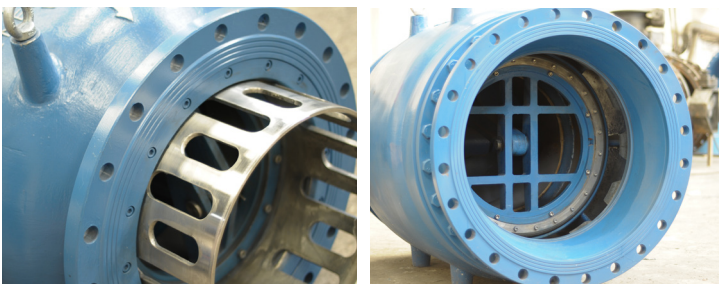
- TS EN 593 Certificated
- PN10 – PN64
- Double Flange
- Face to Face EN 558 – 1 Series 15 (up to DN500 1,5 x DN)
- Open Close and Control Valve
- Axial Movement for Plunger
- Rotationally Symetric Flow
- Metal seaing, additional EPDM seal ring
- Adjustable and Replaceable Sealing Ring
- Mechanical position indicator and limit stops on gear box
- Max Operation Temperature 50°C
- Movement Parts are Stainless Steel

CORROSION PROTECTION

- Electrostatic Powder Coating for Drinking Water
- Zinch – Rich Epoxy Primer
- Coal – Tar Epoxy
- Glass Flake Epoxy
- Enamel Epoxy for Ultraviolet
- Completely Stainless Steel Design
- Ebonite Coating for Seawater

OPERATION

- Handwheel
- Electrical Actuator
- Pneumatic Actuator
- Hydraulic Actuator
- On-off or Modulating Operation



TURBINE BY-PASS VALVE PLUNGER VALVE WITH HYDRAULIC

DN 150/1400 | PN 10/ 16/ 25/ 40/ 64



TURBINE BY-PASS VALVE

DESIGN

- Flanges DIN EN 1092
- Open – close and control valve
- Circle section symmetrical flow
- Moving linear plunger
- Metal sealing, and EPDM sealing ring
- V-port for high pressure difference
- Maximum working temperature 50 °C

CONTROL

- Counterweight and hydraulic pistons help closing very fast with the provide of hydraulic piston will be closed

OPTIONAL

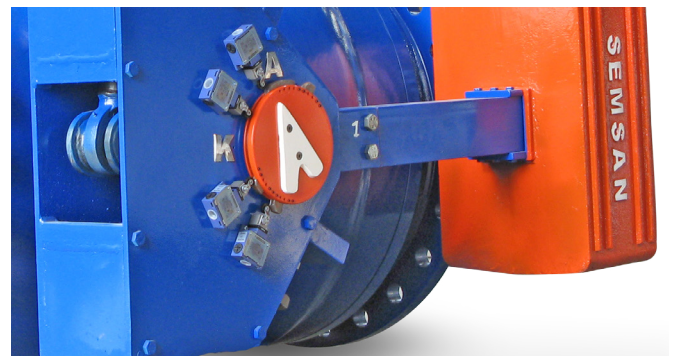
- Electrical actuator
- Handwheel
- DN > 1400

APPLICATION

When the turbine inlet valve closed it is using for bypass the water in penstock and save from hammer and high pressure

MATERIAL

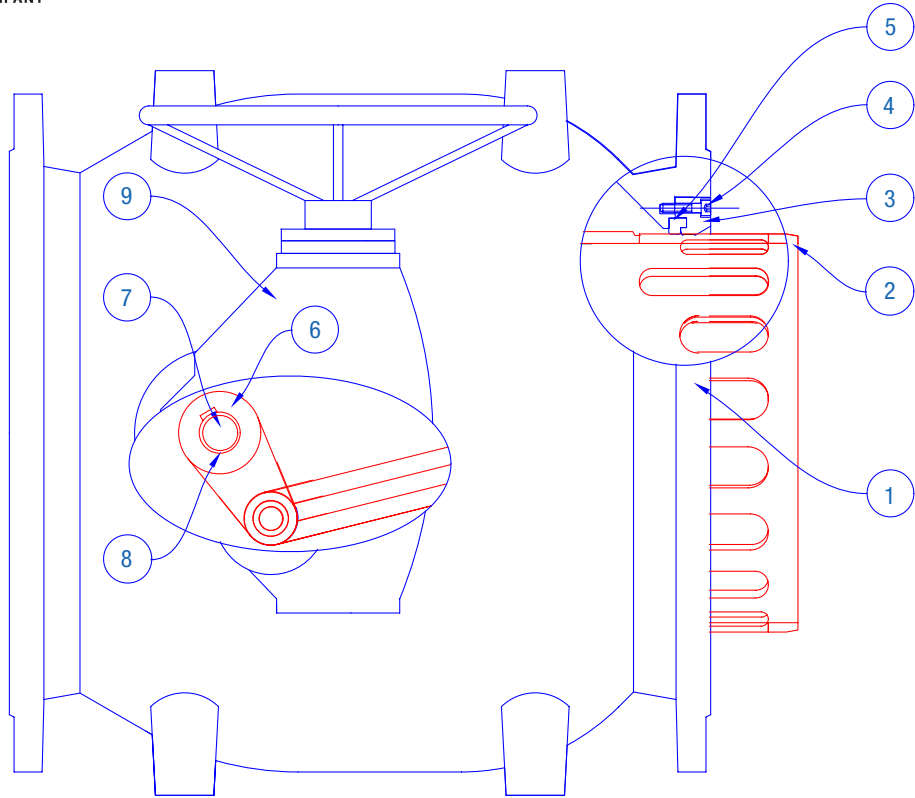
- Body is ductile iron casting (GGG-40/50)
- Moving internal parts stainless steel AISI 304
- Valve shaft is stainless steel AISI 420
- Bearing is bronze
- Plunger seal ring EPDM



LAST QUALITY CONTROL EN 12266 – 1 CLASS A

Nominal Diameter (DN)	Nominal Pressure PN kg / cm2	Test Pressure		Max Pressure for Temperature 50 °C
		Body	Disk	
150.....1400	10	15	15	10
150.....1400	16	24	24	16
150.....1400	25	37,5	27,5	25
150.....1400	40	60	44	40
150.....1400	64	96	71	64

* All of dimensions and explanations has been given for information. SEMSAN reserve right to keep change all them off.

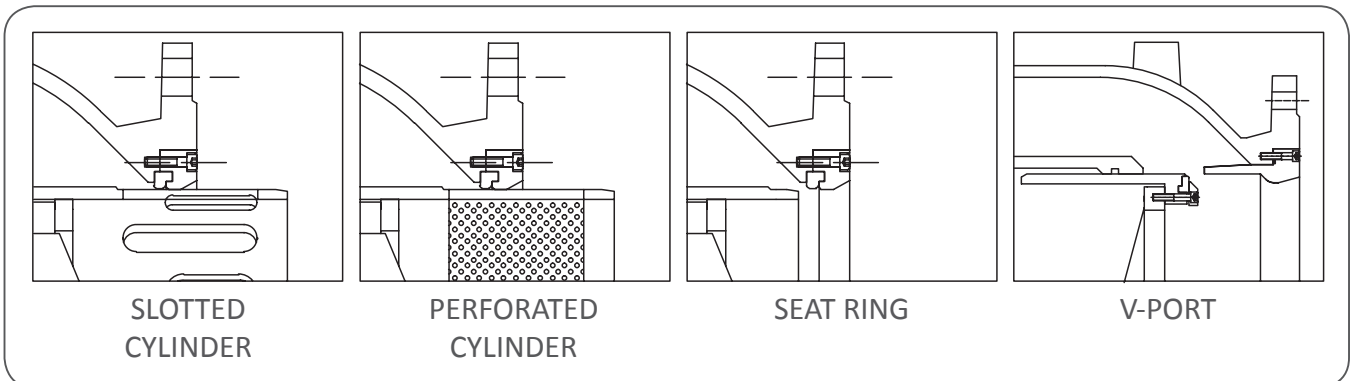


PART LIST

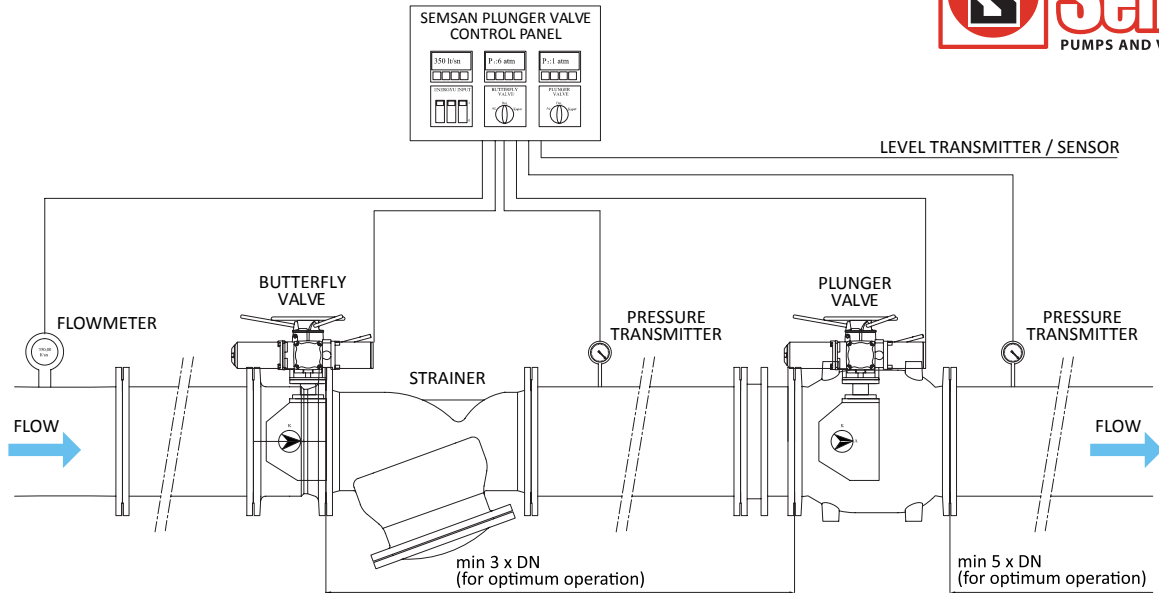


NO	Part Name	Material	
1	Body	GJS 400-15 / GJS 500-7	Stainless Steel
2	Piston (Plunger)	Stainless Steel	
3	Sealing Ring Flange	Stainless Steel	
4	Bolts and Nuts	Stainless Steel	
5	Sealing Ring	EPDM + Metal Sealing	
6	Crank Mechanism	Stainless Steel	
7	Valvre Shaft	AISI 420 (X20Cr13) Stainless Steel	
8	Bearing	GBzSn (Bronze)	
9	Gear Boxes	GJS 400-15 / GJS 500-7	

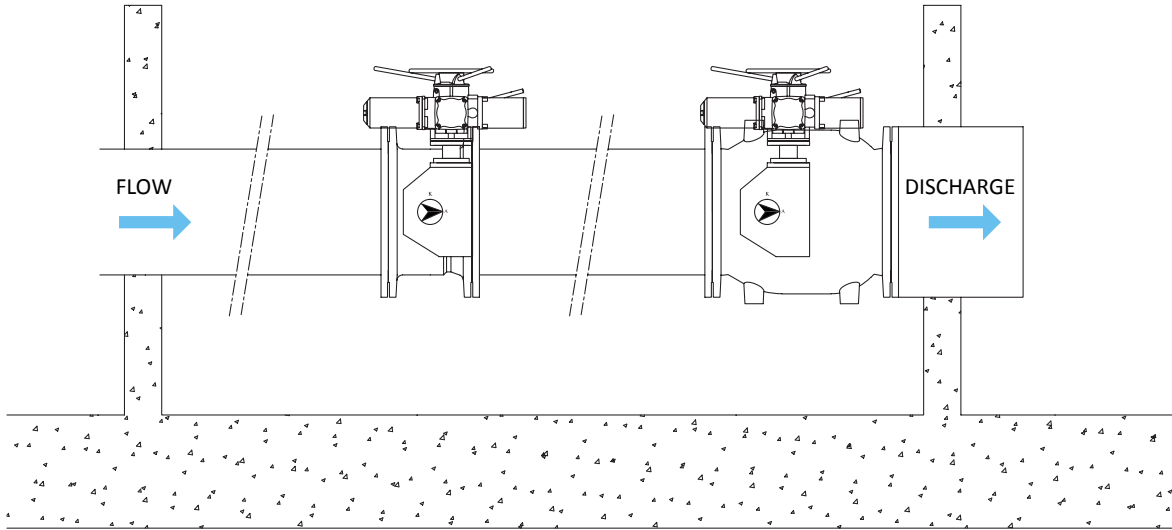
VERSIONS



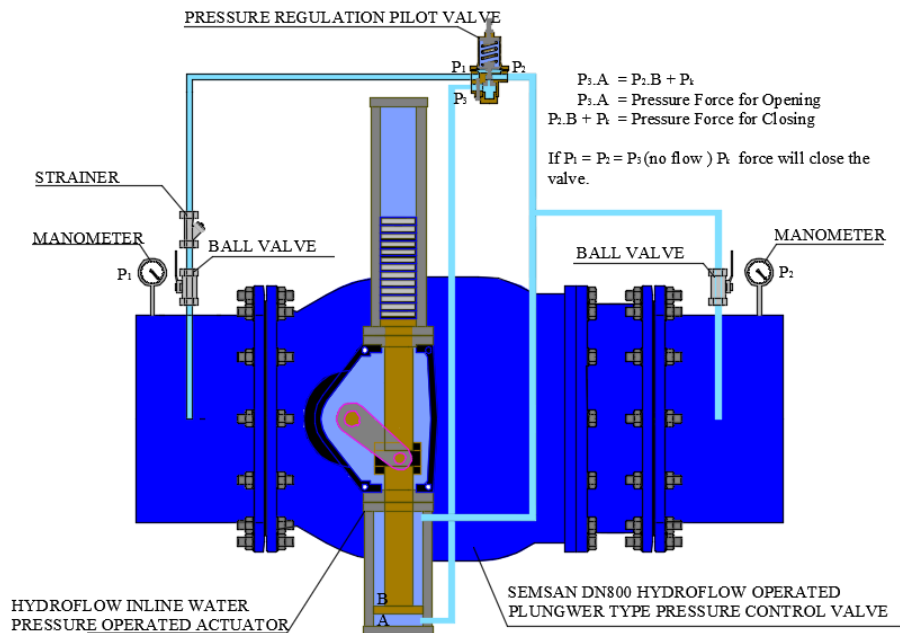
INLINE REGULATION VALVE



BOTTOM OUTLET DISCHARGE VALVE

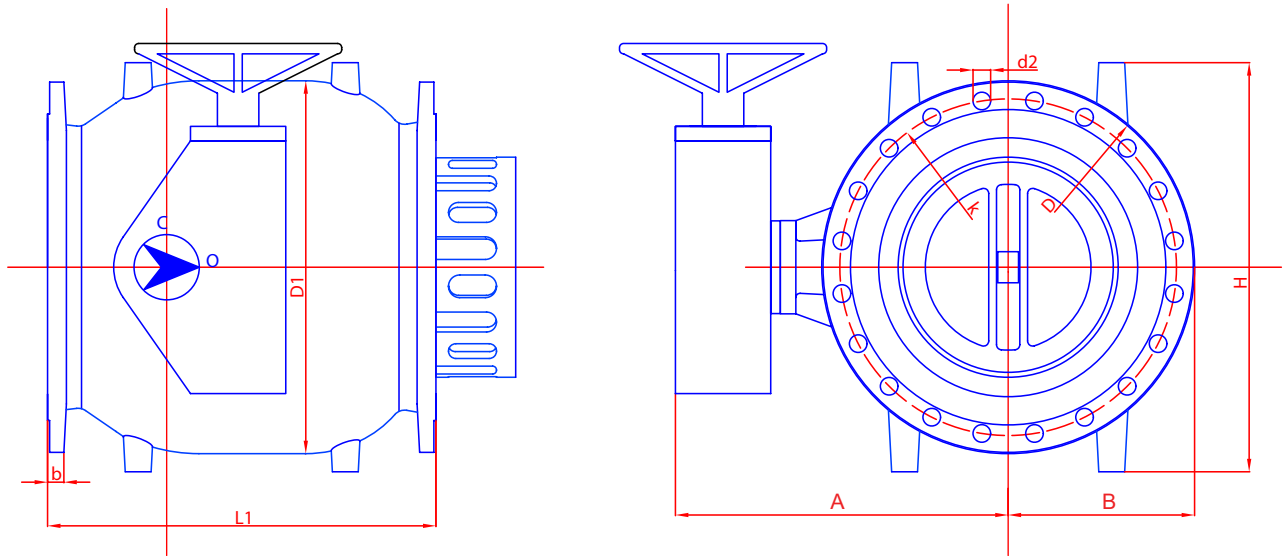


INLINE HYDROFLOW PLUNGER VALVE (WORKING WITH LINE PRESSURE)



PLUNGER VALVE ASSEMBLY DRAWING

PLUNGER VALVE DIMENSION TABLE



PN10 (DN)	BODY			FLANGES					GEAR BOX			WEIGHT (KG)
	A (mm)	B (mm)	L1 (mm)	D (mm)	K (mm)	d2 (mm)	b (mm)	No. of Holes	Model	Turn/ Strok	Torque	
150	283	143	350	285	240	23	19	8	M60	21	25	80
200	315	170	400	340	295	23	20	5	M60	21	30	115
250	375	200	450	400	350	23	22	12	M85	31	30	155
300	455	228	500	455	400	23	24,5	12	M85	31	35	190
400	535	290	600	565	515	28	24,5	16	M110	23	40	335
500	602	360	750	670	620	28	26,5	20	M110	23	50	590
600	660	435	900	780	725	31	30	20	M125	23	70	1030
700	720	515	1050	895	840	31	32,5	24	M160	23	80	1620
800	770	565	1200	1015	950	34	35	24	M160/3	70	80	2050
900	830	630	1350	1115	1050	34	37,5	28	M160/3	70	90	2750
1000	915	695	1500	1230	1160	37	40	28	M200/3	75	100	4000
1200	1070	825	1800	1455	1380	40	45	32	M200/3	225	105	5300

PN16 (DN)	BODY			FLANGES					GEAR BOX			WEIGHT (KG)
	A (mm)	B (mm)	L1 (mm)	D (mm)	K (mm)	d2 (mm)	b (mm)	No. of Holes	Model	Turn/ Strok	Torque	
150	283	143	350	285	240	23	19	8	M60	21	25	80
200	315	170	400	340	295	23	20	5	M60	21	30	115
250	375	200	450	400	355	23	22	12	M85	31	30	155
300	455	228	500	455	410	23	24,5	12	M85	31	35	190
400	535	290	600	580	525	28	24,5	16	M110	23	40	335
500	602	360	750	715	650	28	26,5	20	M110	23	50	590
600	660	435	900	840	770	31	30	20	M125	23	70	1030
700	720	515	1050	910	840	31	32,5	24	M160	23	80	1620
800	770	565	1200	1025	950	34	35	24	M160/3	70	80	2050
900	830	630	1350	1125	1050	34	37,5	28	M160/3	70	90	2750
1000	915	695	1500	1255	1170	37	40	28	M200/3	75	100	4000
1200	1070	825	1800	1485	1390	40	45	32	M200/3	225	105	5300

* All of dimensions and explanations has been given for information. SEMSAN reserve right to keep change all them off.

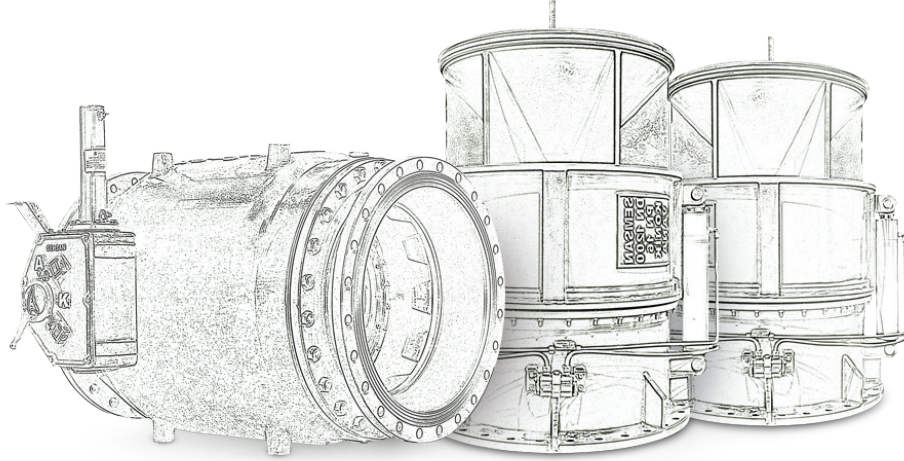
PN25	BODY			FLANGES					GEAR BOX			WEIGHT (KG)	
	(DN)	A (mm)	B (mm)	L1 (mm)	D (mm)	K (mm)	d2 (mm)	b (mm)	No. of Holes	Model	Turn/ Strok		Torque
150	283	143	350	300	250	28	20	8	PLEASE ASK				80
200	315	170	400	360	310	28	22	12		115			
250	375	200	450	425	370	31	24,5	12		165			
300	455	228	500	485	430	31	27,5	16		200			
400	535	290	600	620	550	37	32	16		370			
500	602	360	750	730	660	37	36,5	20		395			
600	660	435	900	845	770	40	42	20		1110			
700	720	515	1050	960	875	43	46,5	24		1820			
800	770	565	1200	1085	990	49	51	24		2150			
900	830	630	1350	1185	1090	49	59,5	28		2850			
1000	915	695	1500	1320	1210	56	60	28		4250			
1200	1070	825	1800	1530	1420	56	74	32		5600			

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PUMP, VALVE & DAM
EQUIPMENTS
PRODUCT CATALOGUE



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